CALFED POTENTIAL ACTION LIST

Categories and Actions	Fisheries and Diversions	Habitat and Land Use/ Flood Protection	Water Supply Availability and Beneficial Uses	Water Quality and Land Use
Restoration of Bay-Delta System Shallow Water (Tidal) Habitat				
-Convert existing leveed lands to tidal action				
-Protect existing shallow habitat from erosion				
-Restore tidal action to existing diked wetlands	X	X		
-Reconstruct levees to include shallow water habitat	X	X		
-Fill deep water to produce shallow habitat				
Restoration of Bay-Delta System Riverine Habitat				
-Reconstruct river banks and shallow areas	X	X		
-Restore and preserve channel islands	X	X		
-Restore natural channel configurations				
-Modify channel/levee construction practices to include riverine elements	X	X		
Restoration of Bay-Delta System Riparian Habitat				
-Improve and protect degraded riparian habitats				
-Establish new areas of riparian habitat				
-Reestablish historic riparian areas				
-Modify levee maintenance practices				
-Protect existing riparian habitat				
Restoration of Bay-Delta System Wetland Habitat				
-Restore, enhance, and create wetlands				
-Expand wetland acquisition programs				
-Convert agricultural lands to wetlands				
-Protect existing wetland habitat				
Restoration of Bay-Delta System Terrestrial Habitat				
-Protect existing upland habitat				
-Establish upland habitat on levees				
-Establish upland habitat on fallowed croplands				
-Establish oak woodlands on suitable soils				
-Encourage wildlife-friendly agricultural practices				
-Preserve agricultural land uses providing habitat				
-Clean up sites contaminated with toxic substances				
Implementation of Integrated Habitat Management Programs				
-Establish regional ecosystem restoration guidelines				
-Implement integrated regional habitat management				
-Develop cooperative management agreements				
-Establish mitigation banking program				

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Establishment of Floodways and Meander Belts -Relocate levees to widen floodways -Allow river channels to meander -Acquire Delta islands as overflow areas -Restore floodways as habitat corridors				
Control of Introduced Species -Remove or reduce nuisance species in key habitats -Improve regulation of ballast-water releases -Improve border inspection practices -Inspect for invasions of nuisance species -Modify habitat to favor native species				
Delta Waterfowl Habitat Management -Manage agricultural crops for waterfowl forage production -Improve management of public waterfowl areas -Implement terrestrial predator control programs -Increase sources and availability of wildlife forage				
Restoration of Upstream Anadromous Fish Habitat -Manage flows and temperatures in upstream habitats -Restore and replenish spawning gravels -Restore channel configurations -Restore shoreline habitat conditions -Modify gravel mining practices -Improve floodway drainage to reduce fish stranding	X		X	
Improvements for Upstream Fish Passage -Modify passage at upstream dams and other barriers -Modify natural barriers to Improve passage				
Restoration of Upstream Riparian Habitat -Restrict livestock grazing in riparian corridors -Revegetate degraded riparian habitats -Protect riparian lands through purchase/easements -Restore flows to dewatered riparian habitats				

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Restoration of Upstream Wetland Habitat				
-Modify floodways to support wetland habitats				
-Reuse agricultural drainage to create wetlands				
-Reuse urban wastewater effluent to create wetlands				
-Manage groundwater recharge for wetland habitat				
Delta Inflow/Outflow/Export Management				
Actions regarding Delta Inflow				
-Modify upstream consumptive use				
-Modify upstream reservoir operations criteria	X		X	
-Modify Delta inflow timing pattern	X		X	
-Provide instream pulse flows for fish passage	X		X	X
-Provide instream flows for fish attraction				
Actions regarding Delta Diversions and Outflows				
-Modify volumes and timing of exports				
-Modify in-Delta consumptive use				
-Modify central Delta channel operations				
-Modify export operations criteria				
-Establish a Delta watermaster to Manage flows				
-Use real-time monitoring and adaptive management				
Modification of Diversion Timing Patterns				
-Modify diversion timing of in-Delta diversions				
-Modify diversion timing of export diversions				
-Coordinate SWP/CVP diversion timing				
-Modify diversion timing through Montezuma Salinity control Gate				
-Use real-time monitoring and adaptive management				
Increased Rates of Diversion Capacity				
-Obtain approvals for expanded export capacities				
-Enlarge export pumping capacities				
-Increase diversion capability at Red Bluff diversion Dam				
Acquisition of Long-Term Water Supplies for Fish and Wildlife				
-Acquire water to augment instream flows	X	X	X	X
-Obtain shifts in timing of instream flows	X	X	X	
-Obtain shifts in diversion timing patterns				
-Acquire water for refuge habitat use				
-Modify water law to Establish instream rights				

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Installation and Improvement of Fish Screens -Improve screens at Delta export pumps -Improve other existing fish screen systems -Install screens on other in-Delta diversions -Install screens on upstream diversions -Consolidate and screen existing small diversions -Enforce screening requirements				
Improvement of Bay-Delta System Fish Migration -Install barriers to block fish movement into Old river -Install barriers to keep fish in Sacramento river -Install barriers to divert fish from Sacramento river to western distributaries -Operate fish barrier on San Joaquin river at Merced river confluence in fall -Provide instream pulse flows for fish passage -Provide instream flows for fish attraction	X			
Improvement of Fish Salvage Operations -Improve design of salvage facilities -Improve operation of salvage facilities -Improve fish hauling and release procedures				
Removal and Control of Aquatic Predators -Harvest predators at Delta export pumps -Harvest predators in upstream habitats				
Fish Hatchery Operations -Expand hatchery capacities -Construct new hatcheries on the San Joaquin river -Improve hatchery operations -Reduce hatchery effects on wild fish populations -Implement tagging of hatchery-bred fish -Establish new captive breeding programs				
Fish Harvest Management -Improve regulation of commercial take -Improve regulation of recreational take -Improve enforcement of Harvest regulations	X			

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Desalination -Expand desalination of Southern California supplies -Expand desalination of San Joaquin Valley supplies -Improve desalination technologies and cost -Educate users about desalination feasibility				
Water Conservation -Increase use of district-wide conservation practices -Increase use of on-farm conservation practices -Increase use of municipal conservation practices -Increase use of industrial conservation practices -Implement financial incentive policies -Implement conservation-oriented rate structures -Educate users about conservation technologies				
Water Reclamation -Recharge groundwater with reclaimed water -Use reclaimed water for agricultural irrigation -Reclaim saline agricultural drainage water -Recycle and treat water for potable Reuse -Use reclaimed water for nonpotable urban uses -Use reclaimed water for landscape irrigation -Use reclaimed water for power plant cooling -Use reclaimed water for industrial processes -Use reclaimed water to repel salinity intrusion -Improve reclamation technologies and cost -Educate public about water reclamation				
Land Retirement and Fallowing -Encourage land fallowing during drought periods -Develop incentive programs for land retirement -Purchase lands or easements -Retire lands with drainage problems				
Water Pricing -Establish incentives for pricing to reduce demand -Educate users about pricing feasibility -Remove legal obstacles to pricing incentive programs				

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Watershed Management				
-Manage vegetation cover to increase yield				
-Manage riparian zones to protect water quality				
-Manage land uses to reduce sedimentation				
-Modify weather to increase precipitation				
New or Expanded On-stream Storage				
-Construct new storage facilities south (downstream) of the Delta				
-Construct new storage facilities north (upstream) of the Delta			X	
-Enlarge existing on-stream storage reservoirs				
-Modify operations of existing on-stream reservoirs			X	X
New or Expanded Off-stream Storage				
-Construct new storage facilities south (downstream) of the Delta				
-Construct new storage facilities north (upstream) of the Delta			X	
-Construct new storage facilities in Delta				
-Enlarge existing off-stream storage reservoirs				
-Modify operations of existing off-stream reservoirs			X	X
Groundwater Banking and Conjunctive Use				
-Establish incentives for conjunctive use				
-Modify water Code to encourage conjunctive use			X	
-Establish conjunctive use programs				
-Store groundwater south (downstream) of the Delta				
-Store groundwater north (upstream) of the Delta			X	
-Implement techniques to increase groundwater recharge				
Improvement of Through-Delta Conveyance				
-Increase capacities of existing east-side channels				
-Increase flows from the Sacramento river to the central Delta				
-Modify Delta levees to increase flow cross sections				
-Construct pump/siphon systems between Delta channels				
-Expand existing intakes at the Delta export facilities				
-Construct expanded export intake/forebay pumping system				

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Construction and Improvement of Conveyance Facilities -Construct east-side isolated transfer system -Construct west-side isolated transfer system -Construct small isolated transfer facility -Convert Delta islands to storage/conveyance system -Construct conveyance to off-stream storage -Construct conveyance to groundwater storage				
Changes in Locations of Diversions -Relocate Delta export pumps from key habitats -Relocate other in-Delta diversions for more reliable supplies -Consolidate in-Delta agricultural diversions -Relocate upstream diversions from key habitats -Improve diversion designs when relocating				
Water Transfers -Modify water Code to ease transfers -Improve procedures for transfer permitting -Coordinate diversion and conveyance of transfers				
Long-Term Planning for Drought Contingencies -Increase water storage capacities at user locations -Establish incentives for long-term planning -Conduct Integrated Resources Planning -Establish incentives for long-term conservation -Develop alternate supplies for drought situations				
Water Resources Data and Information Management -Establish a comprehensive water data system -Implement real-time data management system -Integrate data for adaptive management decisions -Establish accessible data management system				
Establishment of Institution for Integrated Long-Term Water Management -Establish long-term guarantees for management -Establish institution to implement guarantees -Coordinate multiagency roles in management -Coordinate groundwater and surface water management -Establish incentives for cooperation/coordination -Establish a public awareness and education program				

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Establishment of Export Capacity Market -Establish procedures for allocation of export capacity -Establish institution to allocate export capacity -Coordinate water transfers and export capacity -Market export capacity for environmental benefits				
Integration of Land Use and Water Supply Planning -Coordinate land uses with water supplies -Encourage local determination of supplies available -Encourage local assessment of water supply reliability				
Installation and Operation of Flow Barriers -Install flow barriers to manage south Delta quality -Install weirs to control salinity intrusion				
Management of Agricultural Drainage -Implement source control regulations for pollutants -Implement pollutant-load limits in San Joaquin river -Reduce or control volume of agricultural discharges -Modify cropping and irrigation practices -export agricultural drainage to other watersheds -Retire lands with drainage disposal problems -Improve pest-control practices -Avoid use of high-salinity irrigation water -Manage irrigation tailwater to reduce pesticides -Manage drainage timing to reduce instream impacts -Treat drainage to remove salt or other pollutants -Dilute pollutants in Delta inflows from SJR using stored water				
Management of Urban/Industrial Drainage and Wastewater Discharge -Retain and manage stormwater runoff -Implement urban awareness/education programs -Treat discharges to remove problem constituents -Construct wetlands to treat wastewater effluent -Increase key nutrient inputs to estuary -Enforce wastewater discharge requirements -Prevent toxic discharges from industrial plants				

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Dredged Material Management -Limit dredging to slack tides -Limit dredging to avoid fish migration periods -Use techniques to localize sediment movement -Dispose dredged materials at nonaquatic or other suitable sites -Remove contaminated sediments in critical habitat sites -Ensure material used for levee maintenance is noncontaminated				
Management of Abandoned-Mine Drainage -Manage discharges from abandoned mines -Remediate abandoned mining sites discharging pollutants				
Levee Maintenance and Stabilization -Maintain and stabilize existing levees -Modify agricultural practices to reduce subsidence -Use infilling to correct past subsidence -Implement uniform maintenance standards -Provide funding for maintenance and stabilization				
Improvement of Flood Protection Levels and Seismic Stabilities -Reconstruct levees to higher design standards -Reconstruct levees to higher seismic standards -Relocate levees to more stable sites -Widen floodways to Increase flood conveyance -Establish and manage flood overflow areas				
Rerouting and Protection of Infrastructure from Flooding and Seismic Risks -Maintain/reconstruct levees around infrastructure -Reconstruct infrastructure to Increase reliability -Relocate/reroute infrastructure				
Establishment of Long-Term Funding Mechanisms -Establish a disaster contingency funding program -Establish a Bay-Delta financing authority -Provide low-cost debt financing for local agencies -Establish a bond financing mechanism -Establish a statewide water utility surcharge				